

INFORMATION TO BE POSTED AT <http://www.onr.navy.mil/expedlogisfnc/>

PROPOSAL INFORMATION FOR BAA 01-023 ENTITLED

“SKIN-TO-SKIN CONNECTED REPLENISHMENT”

**TECHNOLOGY INTEREST AREAS:** (1) Improved cranes that will compensate for the motion of the sea; (2) Improved fendering technologies or techniques; (3) Fuel transfer systems that will work at very close range; (4) Securing systems that will both hold the ships together and keep them at a safe distance; and (5) Environmentally safe surfactants that will calm the motions of the seas near the connected vessels.

**GENERAL INFORMATION:** The objective of this effort is to proceed during FY02 with technical research in the feasibility of skin-to-skin connected replenishment for ships in the sea base. Offerors can submit a proposal for one or both of the technology thrust areas discussed below. Teaming arrangements are highly encouraged, although offerors are reminded that the FY 02 effort has limited funding available. To provide potential offerors with a more complete understanding of some aspects of the skin-to-skin connected replenishment problem, the following links are provided: <http://earth.agu.org/revgeophys/rogers01/node4.html>; <http://epubs.siam.org/sam-bin/dbq/article/29284>; <http://www.hurricane.net/~chrism/SOCV/sealift.htm>; [http://www.coastal-institute.org/seahub\\_wp.html](http://www.coastal-institute.org/seahub_wp.html); and <http://www.nap.edu/books/0309061903/html/index.html>.

Additional informational material will be posted on the Expeditionary Logistics web site at <http://www.onr.navy.mil/expedlogisfnc/ProductRelated.htm>. Interested parties are encouraged to visit this site and propose technology solutions per the instructions provided in this package.

**TECHNOLOGY THRUST AREAS:** (1) Ship Control and (2) Cargo Transfer Technologies.

**Ship Control.** The intent of this area is to examine methods to control ships connected skin-to-skin in conditions at a maximum of sea state 5 and a minimum of sea state 3.

This may include securing systems, fendering, surfactants, or any other method that will allow the ships to stay connected without suffering any damage to any involved vessel. This area will include dealing with ships without the necessary hardware for skin-to-skin transfer.

**Cargo Transfer Technologies.** The intent of this area is to examine improved methods of solid and liquid cargo transfer, including skin-to-skin fuel transfer and improved cranes, which would allow for the transfer of up to 53,000 pound International Standardization Organization (ISO) containers and fuel while connected skin to skin. This area will include dealing with ships without the necessary hardware for skin-to-skin transfer.

**PERIOD OF PERFORMANCE AND ANTICIPATED AWARD AMOUNTS.** Proposed work shall be structured to include a performance period of twelve (12) months beginning in FY02. FY02 will consist strictly of research into the technology interest areas. Anticipated total funding for each award will typically be in the range of \$160,000 to \$390,000. Anticipated total funding for the program will be \$400,000. Priority will be given to proposals which address both technology thrust areas and all technology interest areas.

**INSTRUCTIONS FOR PREPARING PROPOSALS.** Proposals shall consist of a cover page and three sections – Technical, Management, and Cost. The total length of the proposal shall not exceed twenty-five (25) pages. The page count limitation for the technical section is ten (10) typed pages, ten (10) typed pages for the management section, and five (5) pages for the cost section. The cover page is not included in the page count. Any additional information over the page count limitation will be discarded. A page is defined as 8 1/2 X 11 inch paper, single sided, double spaced, with one-inch margins, and a typeface of 12-point font.

**Cover Page.** The cover page shall be clearly labeled “Proposal” and contain the BAA title and number; the title of proposal; the name of the proposing organization; the name(s) of the administrative and technical points of contact along with telephone number, fax number, and e-mail address (if available). The cover page is not included in the page count.

Technical Section: The technical section is limited to ten (10) pages and shall consist of a clear discussion of the concepts and associated technologies to be studied, study objectives, anticipated major technical issues to be resolved to accomplish objectives, and approaches to resolve these issues. This section shall include a Statement of Work (SOW) that includes a clear description of the proposed work and discussion of the deliverables. A draft report is due 31 May 2002 stating whether or not skin-to-skin connected replenishment is feasible for the US Navy, and if so, what technologies should be focused on. The draft report shall recommend a priority order list of those technologies, products and methods that should be developed, the vessels to which they should be applied, and a detailed development timeline leading to a transitionable product. The final report will be due at the end of the study and will include recommendations as to which technologies, products and methods should be developed to that end.

Management Section. The management section is limited to ten (10) pages and shall include partnering arrangements, key personnel, resumes, specific related experience in the technology thrust areas, facilities, and a plan of action and milestones.

Cost Section. The cost section is limited to five (5) pages and shall consist of a detailed description of costs for the entire fiscal year, cost-by-cost elements including labor categories, labor rates, labor hours associated with each category, and applicable indirect rates. The cost proposal shall also include the applicable DCAA and DCM Branch Offices and back-up documentation to support other direct cost items. Any offeror whose direct and indirect rates cannot be verified by DCAA will be required to provide supporting documentation such as payroll stubs, letters of intent, letters of commitment, and detailed information regarding the calculation of the indirect rates. Subcontractor proposals shall also contain the detailed cost information described in this paragraph. In those instances where Government activities (laboratories) are a member of a teaming arrangement, Government cost share should be broken out separately. Government activities will receive funding of their costs directly from

ONR. All options and assumptions shall be clearly defined and identified. Offers are required to provide an original, signed copy of the Representations, Certifications and Other Statements of Offerors (R&D Contracts) that can be downloaded at

<http://www.onr.navy.mil/scripts/02/howtosubmit.asp>.

**EVALUATION CRITERIA FOR PROPOSALS.** Proposals will be evaluated in accordance with the following criteria, which are listed in descending order of importance.

1. Overall technical merit;
2. Technical innovation and risk to demonstrate;
3. Potential to enhance logistics;
4. Transition potential;
5. Offeror's corporate/team capabilities, related experience, and past performance;
6. Qualifications, capabilities, and related experience of the key personnel; and
7. Cost realism.